Duke Energy Carolinas, LLC Page 1 of 18

August 20, 2020		

1		DIRECT TESTIMONY AND EXHIBITS OF
2		ANTHONY D. BRISENO
3		ON BEHALF OF
4		THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF
5		DOCKET NO. 2020-3-E
6		IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS FOR
7		DUKE ENERGY CAROLINAS, LLC, DECREASING RESIDENTIAL AND
8		NON-RESIDENTIAL RATES
9		
10	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.
11	Α.	My name is Anthony D. Briseno. My business address is 1401 Main Street, Suite
12		900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as a
13		Senior Auditor for the Office of Regulatory Staff ("ORS").
14	Q.	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
15	A.	I received my Bachelor of Science in Business Administration in Accounting from
16		Coastal Carolina University in August 2014. I received my Master of Accountancy Degree
17		from Coastal Carolina University in August 2015. I also received a Graduate Certificate
18		for completion of the Fraud Examination Program at Coastal Carolina University in August
19		2015. I began my employment as an Auditor with ORS in October 2016 and was promoted
20		to Senior Auditor in August of 2019. I have participated in various cases involving the
21		regulation of electric, gas, water and wastewater utilities.
22	Q.	HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC SERVICE
23		COMMISSION OF SOUTH CAROLINA ("COMMISSION")?
24	Α.	Yes. I have previously testified before the Commission.

1

Page 2 of 18

Q. WHAT IS THE MISSION OF ORS?

2 ORS represents the public interest as defined by the South Carolina General Α. 3 Assembly as:

Docket No. 2020-3-E

4 [T]he concerns of the using and consuming public with respect to public 5 utility services, regardless of the class of customer, and preservation of 6 continued investment in and maintenance of utility facilities so as to provide 7 reliable and high-quality utility services.

8 WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS Q. 9 PROCEEDING?

10 The purpose of my direct testimony is to present the results of ORS's examination A. 11 of the books and records pertaining to Duke Energy Carolinas, LLC's ("DEC" or 12 "Company") operations under the Fuel Adjustment Clause ("FAC"). The current fuel examination covered the actual period of June 1, 2019 through May 31, 2020 ("Actual 13 Period"). For Commission consideration, my direct testimony and exhibits also include the 14 15 estimated, unaudited four (4) months of June 1, 2020 through September 30, 2020 ("Estimated Period"). 16

WHAT WAS THE PURPOSE OF ORS'S EXAMINATION? 17 Q.

18 The purpose of ORS's examination was to determine if the Company's accounting Α. 19 practices in computing and applying the monthly FAC complied with South Carolina ("S.C.") Code Ann. §§ 58-27-865, 58-39-130, 58-39-140, 58-40-20, and prior Commission 20 21 orders.

WAS THE REVIEW PERFORMED BY YOU OR UNDER YOUR SUPERVISION? 22 Q.

23 Α. Yes. The review to which I testify was performed by me or under my supervision.

24 WHAT WAS THE SCOPE OF ORS'S EXAMINATION? Q.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Α.

Duke Energy Carolinas, LLC

ORS examined and verified the monthly calculations and the (over)/under-recovery balances recorded in the Company's books and records for base fuel costs, environmental costs, capacity costs, Distributed Energy Resource Program ("DERP") incremental costs, and DERP avoided costs for the Actual Period. ORS verified these monthly calculations and (over)/under-recovery balances to the Company's monthly fuel reports and the Company's testimony and exhibits filed in this docket. ORS's examination consisted of the following:

1. Analyzing the Fuel Stock Accounts

ORS's analysis of the fuel stock accounts consisted of verifying receipts to and issuances from the fuel management system to the general ledger, examining monthly fuel charges originating in the fuel stock accounts, and ensuring that only proper charges were entered in the Company's computation of fuel costs for purposes of adjusting the base fuel factor.

2. Sampling Receipts to the Fuel Stock Accounts

ORS's review of receipts to the fuel stock accounts consisted of examining and testing transactions in coal and natural gas that support additions to the accounts during the Actual Period. Each coal transaction sampled was examined and tested for mathematical accuracy and vouched to a commodity received report, corresponding waybill or truck bill, supplier invoice, base cost report, freight invoice, and transportation cost report. Coal transactions were then verified to fuel management system payment vouchers to verify payments of the correct amounts to the vendors. ORS sampled natural gas transactions and examined them for mathematical accuracy

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Page 4 of 18

and verified them to third party invoices and bank statements to verify payments of the correct amounts to the vendors.

3. Verifying Coal, Oil, and Natural Gas Expenses

ORS verified the amounts of coal, oil and natural gas consumed for electric generation for each month of the Actual Period by reviewing inventory control reports, general ledger accounts, and calculation worksheets. Biogas was included in the cost of natural gas expenses reviewed by ORS. ORS verified biogas calculations for each month in the Actual Period by using the kilowatt-hours ("kWh") attributable to biogas at the generation facility multiplied by the Commission-approved Avoided Fuel-Only rate from Docket No. 1995-1192-E.

4. Verifying Charges to Nuclear Fuel Expenses

ORS verified the amounts of nuclear fuel expenses to the Company's books and records for the Actual Period. In addition, these amounts were verified to the Company's nuclear fuel burned amortization schedules. ORS recalculated the Company's nuclear fuel burned amortization schedules to verify mathematical accuracy.

5. <u>Verifying Purchased Power and Power Sales</u>

ORS verified the Company's purchased and interchange power fuel cost, megawatthour ("MWh") purchases, and MWh sales for the Actual Period to the Company's intersystem purchase and sales transaction reports and monthly invoices, on a sample basis. The purchases sampled were also verified to proof of payment information to ensure payments to vendors were accurate and agreed to the invoices received by the Company. This verification included reviewing intercompany power transactions

1480 0 0110

Duke Energy Carolinas, LLC

1 related to the Joint Dispatch Agreement ("JDA") between the Company and Duke 2 Energy Progress, LLC ("DEP"). 3 ORS recomputed the Company's sales and purchases for the Actual Period. The purchased and interchange power amounts for the Actual Period and the resultant 4 5 (over)/under-recovery monthly deferred fuel amounts for the Actual Period reflect 6 calculations that conform to S.C. Code Ann. § 58-27-865. Subsection (A)(2)(b) of this statute states that the total delivered cost of economy purchases, including, but not 7 8 limited to, transmission charges, are included in purchased power costs if those 9 purchases are "less than the purchasing utility's avoided variable costs for the 10 generation of an equivalent quantity of electric power." As such, ORS verified that the 11 economic purchases were recorded at, or less than, the Company's applicable avoided 12 costs. ORS sampled and tested power sales transactions for mathematical accuracy and 13 14 verified these transactions to the invoices issued by the Company to third parties. ORS 15 sampled various hours of the power sales transactions to verify the accuracy of the 16 generation cost being assigned to the sale within the sampled hour by the Company. 17 6. Verifying kWh Sales 18 ORS verified total system kWh sales to the Company's Operating Revenue Reports for 19 the Actual Period. ORS recalculated and verified the Net Energy Metering ("NEM") 20 solar kWh generation reported on the NEM cost reports. Total system kWh sales, S.C. 21 retail kWh sales, and NEM solar kWh generation were used in the computations of the 22 (over)/under-recovery of base fuel costs, environmental costs, capacity costs, and 23 DERP avoided costs.

August 20, 2020 Page 6 of 18

1	7.	Recalculating the Fuel Adjustment Factors and Verifying the (Over)/Under-Recovery
2		of Base Fuel Costs
3		ORS recalculated the fuel costs for the Actual Period utilizing information obtained
4		from the Company's books and records and verified the recalculated costs to the
5		Company's monthly fuel reports. In recalculating the monthly fuel costs, ORS divided
6		adjusted system fuel costs by adjusted system kWh sales to arrive at fuel costs per kWh
7		sold. The fuel costs per kWh sold were then multiplied by the adjusted S.C. retail kWh
8		sales to determine the S.C. retail base fuel costs. The S.C. retail base fuel costs billed
9		to S.C. retail customers were compared to the S.C. retail base fuel costs to compute the
10		deferred fuel entry - (over)/under-recovery for each month of the Actual Period. The
11		(over)/under-recovery for each month in the Actual Period was verified to the
12		Company's monthly fuel reports. ORS also recalculated the Company's calculations
13		for the Estimated Period to ensure accuracy.
14	8.	Recalculating the Environmental Costs and Verifying the (Over)/Under-Recovery of
15		Environmental Costs
16		Per S.C. Code Ann. § 58-27-865(A)(1),
17 18 19 20		'fuel cost' also shall include the following variable environmental costs: (a) the cost of ammonia, lime, limestone, urea, dibasic acid and catalysts consumed in reducing or treating emissions, and (b) the cost of emission allowances, as used, including allowance for SO2, NOx, mercury, and particulates.
21 22		S.C. Code Ann. § 58-27-865(A)(1) also states that, "[a]ll variable environmental costs
23		included in fuel costs shall be recovered from each class of customers as a separate
24		environmental component of the overall fuel factor."
25		ORS verified the reagent expenses, emission allowances expensed, emission
26		allowances sold, and environmental costs recovered through power sales for the Actual

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Duke Energy Carolinas, LLC

Period. The primary reagent expenses reviewed for the purpose of this examination include lime/limestone, magnesium hydroxide, calcium carbonate, ammonia, urea, activated carbon and Mercontrol 8034 Plus. ORS sampled and verified that reagents purchased during the Actual Period agreed to base cost reports, transportation cost reports, and vouchers for payment. These reagents are used to reduce the emissions produced by the Company's power generation facilities during the production of electricity. The emission allowances reviewed for the purposes of this examination include Sulfur Dioxide ("SO₂") and Nitrogen Oxide ("NO_X") emission allowances. ORS recalculated the SO₂ and NO_X emission allowances expensed for the Actual Period as included in the Company's books and records. Emission allowances sold during the Actual Period were agreed to the transaction agreements and ORS ensured any gains/net proceeds were used to offset the environmental costs of this component per S.C. Code Ann. § 58-27-865. Subsection (A)(1) of this statute requires that "fuel costs must be reduced by the net proceeds of any sales of emission allowances by the utility." ORS verified the calculations of environmental costs recovered through off-system sales that reduced environmental costs for each month of the Actual Period, to arrive at the net environmental costs. ORS then used the S.C. retail kWh sales divided by the total system kWh sales excluding off-system sales to determine the S.C. allocation factor to apply to the net environmental costs. The environmental costs billed to S.C. retail customers were compared to the S.C. portion of environmental costs to compute the (over)/under-recovery for each month of the Actual Period. The (over)/under-

recovery for each month in the Actual Period was verified to the Company's monthly

Page 8 of 18

Duke Energy Carolinas, LLC

1		fuel reports. ORS also recalculated the Company's calculations for the Estimated
2		Period to ensure accuracy.
3	9.	Recalculating the Capacity Costs and Verifying the (Over)/Under-Recovery of
4		Capacity Costs
5		ORS verified the purchased power capacity costs to the Company's monthly fuel
6		reports for the Public Utility Regulatory Policy Act of 1978 ("PURPA") purchases.
7		This verification included the review of schedules detailing the breakdown of capacity
8		costs and energy costs for power purchases in the Actual Period. Natural gas capacity
9		costs were agreed to the Company's books and records for each month of the Actual
10		Period. Per S.C. Code Ann. § 58-27-865(A)(1),
11 12 13 14 15		if capacity costs are permitted to be recovered through the fuel factor, such costs shall be allocated and recovered from customers under a separate capacity component of the overall fuel factor based on the same method that is used by the utility to allocate and recover variable environmental costs.
16		ORS then used the S.C. retail kWh sales divided by the total system kWh sales
17		excluding off-system sales to determine the S.C. allocation factor to apply to the
18		capacity costs. The capacity costs billed to S.C. retail customers were compared to the
19		S.C. portion of capacity expenses to compute the (over)/under-recovery for each month
20		of the Actual Period. The (over)/under-recovery for each month in the Actual Period
21		was verified to the Company's monthly fuel reports. ORS also recalculated the
22		Company's calculations for the Estimated Period to ensure accuracy.
23	10.	Recalculating the DERP Incremental Costs and Verifying the (Over)/Under-Recovery
24		of DERP Incremental Costs
25		Per S.C. Code Ann. § 58-27-865(A)(1),

Duke Energy Carolinas, LLC Page 9 of 18

the incremental and avoided costs of distributed energy resource programs and net metering as authorized and approved under Chapters 39 and 40, Title 58 shall be allocated and recovered from customers under a separate distributed energy component of the overall fuel factor that shall be allocated and recovered based on the same method that is used by the utility to allocate and recover variable environmental costs.

6 7

8

9

10

11

12

13

14

15

16

17

18

19

21

22

23

24

25

26

27

1 2

3

4

5

ORS verified the DERP incremental costs to the Company's monthly fuel reports for the Actual Period. This included verifying that general ledger transactions were supported by invoices. ORS recalculated the NEM cost reports provided by the Company for each month of the Actual Period. Additionally, ORS recalculated the NEM solar generation kWh sales and the avoided fuel benefits of S.C. NEM. ORS recalculated the Solar Rebate amortization schedule and the associated carrying costs. ORS also examined the shared solar program and purchase power agreement ("PPA") expenses that occurred within the Actual Period. The DERP incremental costs billed to S.C. retail customers were compared to the DERP incremental costs to compute the (over)/under-recovery for each month of the Actual Period. The (over)/under-recovery for each month in the Actual Period was verified to the Company's monthly fuel reports. ORS also recalculated the Company's calculations for the Estimated Period to ensure accuracy.

20

11. Recalculating the DERP Avoided Costs and Verifying the (Over)/Under-Recovery of

DERP Avoided Costs

ORS verified the DERP avoided costs for PPAs to the Company's monthly fuel reports for PURPA Purchases. The verification of PPA and shared solar program costs included the review of schedules detailing the calculations for capacity costs and energy costs for the purchases made within the Actual Period. ORS used the S.C. retail kWh sales divided by the total system kWh sales excluding off-system sales to

Duke Energy Carolinas, LLC

August 20, 2020 Page 10 of 18

1		determine the S.C. allocation factor to apply to the DERP avoided costs. The DERP
2		avoided costs billed to S.C. retail customers were compared to the S.C. portion of
3		DERP avoided costs to compute the (over)/under-recovery for each month of the
4		Actual Period. The (over)/under-recovery for each month in the Actual Period was
5		verified to the Company's monthly fuel reports. ORS also recalculated the Company's
6		calculations for the Estimated Period to ensure accuracy.
7		12. Company Adjustments Made in the Actual and Estimated Periods
8		ORS reviewed and recalculated any adjustments made by the Company for the Actual
9		Period. ORS recalculated any adjustments made by the Company for the Estimated
10		Period and will fully examine those adjustments when they are included in the Actual
11		Period as part of the Company's next FAC review.
12	Q.	PLEASE EXPLAIN THE AUDIT EXHIBITS ATTACHED TO YOUR
13		TESTIMONY.
14	A.	ORS prepared the following audit exhibits based upon ORS's review of the
15		Company's books and records:
16		AUDIT EXHIBIT ADB-1: TOTAL FUEL RECEIVED AND WEIGHTED
17		AVERAGE FUEL COST
18		This exhibit details the total cost of \$1,063,208,382 for coal, oil, and natural gas (includes
19		biogas) received for each month during the Actual Period. ORS has also computed the
20		weighted average cost of each type of fuel: coal (\$85.33 per ton), oil (\$1.77 per gallon),
21		and natural gas (\$3.16 per thousand cubic feet ("MCF")).
22		AUDIT EXHIBIT ADB-2: RECEIVED COAL - COST PER TON COMPARISON

ast 20, 2020	
--------------	--

This exhibit details the received cost per ton of coal for each month of the Actual Period
for DEC, DEP, and Dominion Energy South Carolina, Inc. ("DESC"). For comparison
purposes, ORS has shown the invoice cost per ton, freight cost per ton, total cost per ton,
and the cost per thousand British thermal units ("MBTU") for each company. The coal cost
comparison information used for DEP and DESC have not been audited as part of this
docket.
AUDIT EXHIBIT ADB-3: COST OF FUEL BURNED FOR ELECTRIC
GENERATION
This exhibit details the per book cost of fuel burned for electric generation for each month
of the Actual Period. The cost of burned fuel is broken into four (4) types: coal, oil, natural
gas (includes biogas) and nuclear. The burned cost of each type of fuel is shown separately
along with its percentage of total burned costs. These costs are used in the computations of
base fuel costs.
AUDIT EXHIBIT ADB-4: COST OF FUEL
This exhibit details ORS's computation of the total fuel cost applicable to the base fuel
recovery calculation for the Actual Period. There are four (4) components included in this
cost and they are as follows:
(1) Cost of Fuel Burned;
(2) Fuel Cost of Purchased and Interchange Power;
(3) Fuel Cost Recovered from Power Sales; and
(4) Solar Integration Fees.
Cost of Fuel Burned – This amount is the total cost of all coal, oil, natural gas, and nuclear

fuel burned, detailed by month for the Actual Period, and used in the base fuel costs

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Page 12 of 18

Duke Energy Carolinas, LLC

component computation. A detailed breakdown of coal, oil, natural gas, and nuclear fuel can be seen in Audit Exhibit ADB-3. Fuel Cost of Purchased and Interchange Power – This amount is the total fuel cost of MWhs purchased from other electric utilities or power marketers detailed by month for the Actual Period. Fuel Cost Recovered from Power Sales – This amount is the total fuel cost recovery related to MWhs sold to other electric utilities or power marketers detailed by month for the Actual Period. These costs lower the cost of fuel for each month of the Actual Period. Solar Integration Fees – This amount is the total variable fees paid to the Company from solar generating customers detailed by month for the Actual Period. These fees lower the cost of fuel for each month of the Actual Period. AUDIT EXHIBIT ADB-5: DETAILS OF THE COMPUTATION OF THE (OVER)/UNDER-RECOVERY OF BASE FUEL COSTS This exhibit details the (over)/under-recovery of base fuel cost computations by month for the Actual and Estimated Periods. This exhibit also shows the computations of the actual and estimated cumulative (over)/under-recovery balances of base fuel costs and any adjustments for the Actual Period and Estimated Period. AUDIT EXHIBIT ADB-6: TOTAL ENVIROMENTAL COSTS This exhibit details the total environmental costs for the Actual Period by month for magnesium hydroxide, calcium carbonate and other sorbents, emission allowances (expensed and sold), ammonia and urea, lime/limestone, and MerControl 8034 Plus. Additionally, the percentage of total cost is shown for each environmental component for

each month in the Actual Period.

Duke Energy Carolinas, LLC Page 13 of 18 AUDIT EXHIBIT ADB-7: DETAILS OF THE COMPUTATION OF THE

August 20, 2020

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

(OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS

This exhibit details the (over)/under-recovery of environmental cost computations by month for the Actual and Estimated Periods for total environmental costs and off-system sales. This exhibit also shows the computation of the actual and estimated cumulative (over)/under-recovery balances of environmental costs and any adjustments for the Actual Period and Estimated Period.

AUDIT EXHIBIT ADB-8: DETAILS OF THE COMPUTATION OF THE (OVER)/UNDER-RECOVERY OF CAPACITY COSTS

This exhibit details the (over)/under-recovery of PURPA purchased power avoided capacity costs and natural gas capacity costs by month for the Actual and Estimated Periods. Pursuant to Act 236, which became effective June 2014, the avoided capacity component of PURPA purchased power costs and the natural gas capacity costs, which are permitted to be recovered through the fuel factor, are now allocated and recovered as a separate component of the overall fuel factor in the same manner as environmental costs. This exhibit also shows the computation of the actual and estimated cumulative (over)/under-recovery balances of capacity costs and any adjustments for the Actual Period and Estimated Period.

AUDIT EXHIBIT ADB-9: DETAILS OF THE COMPUTATION OF THE (OVER)/UNDER-RECOVERY OF DERP INCREMENTAL COSTS

This exhibit details the (over)/under-recovery of DERP incremental costs by month for the Actual and Estimated Periods. This exhibit also shows the computation of the actual and

Duke Energy Carolinas, LLC
Page 14 of 18

August 20, 2020

5

6

7

8

12

13

14

15

16

17

18

19

22

23

1	estimated cumulative (over)/under-recovery balances of DERP incremental costs and any
2	adjustments for the Actual Period and Estimated Period.

3 AUDIT EXHIBIT ADB-10: DETAILS OF THE COMPUTATION OF THE 4 (OVER)/UNDER-RECOVERY OF DERP AVOIDED COSTS

This exhibit details the (over)/under-recovery of DERP avoided cost computations by month for the Actual and Estimated Periods. This exhibit also shows the computation of the actual and estimated cumulative (over)/under-recovery balances of DERP avoided costs and any adjustments for the Actual Period and Estimated Period.

9 Q. PLEASE EXPLAIN ORS'S COMPUTATION OF THE CUMULATIVE 10 (OVER)/UNDER-RECOVERY OF BASE FUEL COSTS IN AUDIT EXHIBIT ADB11 5.

A. Audit Exhibit ADB-5 provides details of ORS's calculation of the actual cumulative under-recovery balance through May 2020 of \$8,256,488, and the estimated cumulative over-recovery balance through September 2020 of \$18,869,976. Company witness McGee's testimony (McGee Exhibit 2, pages 1 through 2) in this docket reports a cumulative under-recovery balance through May 2020 of \$8,256,489, and an estimated cumulative over-recovery balance through September 2020 of \$18,869,974. The differences between ORS's and the Company's ending balances for May 2020 and September 2020 are due to rounding.

20 Q. DID THE COMPANY MAKE ANY ADJUSTMENTS DURING EITHER THE 21 ACTUAL OR ESTIMATED PERIODS FOR BASE FUEL COSTS?

A. Yes. Company witness McGee explains the base fuel costs adjustment for (\$198,316) in May 2020 in her direct testimony on pages 15-16. While not specifically

20

21

22

23

Α.

1 covered in Company witness McGee's testimony, the base fuel costs adjustment for (\$23) 2 in March 2020 is a similar adjustment to the one described by Company witness McGee in 3 her direct testimony on page 9. These adjustments are reflected in Audit Exhibit ADB-5 as adjustments (A) and (B). ORS has reviewed and accepts the adjustments made by the 4 5 Company for base fuel costs. 6 Q. PLEASE EXPLAIN ORS'S **COMPUTATION OF** THE **CUMULATIVE** 7 (OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS IN AUDIT EXHIBIT ADB-7. 8 9 Audit Exhibit ADB-7 provides details of ORS's calculation of the actual Α. 10 cumulative environmental cost over-recovery balance through May 2020 of \$1,044,760, 11 and the estimated cumulative over-recovery balance through September 2020 of 12 \$1,249,554. Company witness McGee's testimony (McGee Exhibit 4, pages 1 through 6) 13 in this docket reports a cumulative over-recovery balance through May 2020 of \$1,044,761, 14 and an estimated cumulative over-recovery balance through September 2020 of 15 \$1,249,555. The differences between ORS's and the Company's ending balances for May 16 2020 and September 2020 are due to rounding. 17 Q. **PLEASE** EXPLAIN ORS'S COMPUTATION **OF** THE **CUMULATIVE** (OVER)/UNDER-RECOVERY OF CAPACITY COSTS IN AUDIT EXHIBIT ADB-18 19 8.

> Audit Exhibit ADB-8 provides details of ORS's calculation of the actual cumulative capacity cost over-recovery balance through May 2020 of \$1,748,011, and the estimated cumulative under-recovery balance through September 2020 of \$408,492. Company witness McGee's testimony (McGee Exhibit 6, pages 1 through 6) in this docket

Duke Energy Carolinas, LLC

August 20, 2020

reports the same cumulative over-recovery balance through May 2020 and the same cumulative under-recovery balance through September 2020.

- Q. PLEASE EXPLAIN ORS'S COMPUTATION OF THE CUMULATIVE

 (OVER)/UNDER-RECOVERY OF DERP INCREMENTAL COSTS IN AUDIT
- 5 **EXHIBIT ADB-9.**
- 6 Α. Audit Exhibit ADB-9 provides details of ORS's calculation of the actual 7 cumulative DERP incremental cost over-recovery balance through May 2020 of \$2,906,925, and the estimated cumulative over-recovery balance through September 2020 8 of \$2,704,178. Company witness McGee's testimony (McGee Exhibit 8, pages 1 through 9 10 2) in this docket reports a cumulative over-recovery balance through May 2020 of 11 \$2,906,930 and a cumulative over-recovery balance through September 2020 of 12 \$2,704,183. The differences between ORS's and the Company's ending balances for May 2020 and September 2020 are due to rounding. 13
- 14 Q. DID THE COMPANY MAKE ANY ADJUSTMENTS DURING EITHER THE
 15 ACTUAL OR ESTIMATED PERIODS FOR DERP INCREMENTAL COSTS?
- Yes. Company witness McGee explains the one (1) DERP incremental costs adjustment in her direct testimony on pages 11-12. This adjustment is reflected in Audit Exhibit ADB-9 as adjustment (C). ORS has reviewed and accepts the adjustment made by the Company for DERP incremental costs.
- Q. PLEASE EXPLAIN ORS'S COMPUTATION OF THE CUMULATIVE
 (OVER)/UNDER-RECOVERY OF DERP AVOIDED COSTS IN AUDIT EXHIBIT
 ADB-10.

Duke Energy Carolinas, LLC

1	A.	Audit Exhibit ADB-10 provides details of ORS's calculation of the actual
2		cumulative DERP avoided costs over-recovery balance through May 2020 of \$117,601 and
3		the estimated cumulative over-recovery balance through September 2020 of \$121,071.
4		Company witness McGee's testimony (McGee Exhibit 12, pages 1 through 6) in this
5		docket reports the same cumulative over-recovery balance through May 2020, and an
6		estimated cumulative over-recovery balance through September 2020 of \$121,072. The
7		difference between ORS's and the Company's ending balance for September 2020 is due
8		to rounding.
9	Q.	WHAT IS THE RESULT OF ORS'S EXAMINATION?
10	A.	Based on ORS's examination of the Company's books and records, and the
11		Company's operations under the fuel cost recovery mechanism, it is ORS's opinion, that
12		subject to the Company's adjustments the Company's accounting practices are in
13		compliance with S.C. Code Ann. §§ 58-27-865, 58-39-130, 58-39-140, 58-40-20, and prior
14		Commission orders.
15		Based on ORS's examination, ORS agrees with the following cumulative (over)/under-
16		recovery balances as calculated in Company witness McGee's Exhibits in this docket:
17		• May 2020 base fuel costs under-recovery balance of \$8,256,489;
18		• May 2020 environmental costs over-recovery balance of \$1,044,761;
19		• May 2020 capacity costs over-recovery balance of \$1,748,011;
20		• May 2020 DERP incremental costs over-recovery balance of \$2,906,930;
21		• May 2020 DERP avoided costs over-recovery balance of \$117,601;
22		• September 2020 base fuel costs over-recovery balance of \$18,869,974;
23		• September 2020 environmental costs over-recovery balance of \$1,249,555;

Duke Energy Carolinas, LLC

August 20, 2020 Page 18 of 18

- September 2020 capacity costs under-recovery balance of \$408,492;
- September 2020 DERP incremental costs over-recovery of \$2,704,183; and
- September 2020 DERP avoided costs over-recovery balance of \$121,072.
- 4 Q. WILL YOU UPDATE YOUR DIRECT TESTIMONY BASED ON INFORMATION
- 5 THAT BECOMES AVAILABLE?
- 6 A. Yes. ORS fully reserves the right to revise its recommendations via supplemental
- 7 testimony should new information not previously provided by the Company, or other
- 8 sources, becomes available.
- 9 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 10 **A.** Yes, it does.

Office of Regulatory Staff Total Fuel Received and Weighted Average Fuel Cost Duke Energy Carolinas, LLC For Year Ending May 2020 Docket No. 2020-3-E

Month	<u>Co</u>	o <u>al</u>	<u>Oil</u>		<u>Natur</u>	Natural Gas	
	Ton	\$	Gal	\$	MCF	\$	\$
Jun-19	787,609	54,120,195	779,630	1,501,948	9,906,550	32,590,700	88,212,843
Jul-19	769,134	77,921,573	578,824	1,159,477	12,157,721	36,724,747	115,805,797
Aug-19	848,217	56,954,763	467,291	900,251	11,738,046	35,658,597	93,513,611
Sep-19	673,579	45,978,924	418,618	843,735	12,106,577	37,037,382	83,860,041
Oct-19	703,259	72,149,864	201,786	408,753	8,139,334	26,699,616	99,258,233
Nov-19	636,669	40,553,590	508,395	1,015,458	5,572,702	21,828,404	63,397,452
Dec-19	763,494	52,508,080	599,754	1,230,541	10,119,670	36,594,325	90,332,946
Jan-20	759,052	84,155,961	390,104	759,592	12,686,962	39,715,760	124,631,313
Feb-20	508,088	34,368,969	443,102	774,833	12,725,718	39,261,207	74,405,009
Mar-20	563,324	40,608,764	406,177	547,458	12,621,582	36,985,968	78,142,190
Apr-20	477,712	83,376,461	178,995	163,122	6,663,464	22,468,541	106,008,124
May-20	216,833	14,942,689	699,301	714,612	10,589,903	29,983,522	45,640,823
Total	7,706,970	\$ 657,639,833	5,671,977	\$10,019,780	125,028,229	\$ 395,548,769	\$1,063,208,382
Weighted Average Cost <u>\$ 85.33</u>				\$ 1.77		\$ 3.16	

Office of Regulatory Staff Received Coal - Cost Per Ton Comparison Duke Energy Carolinas, LLC For Year Ending May 2020 Docket No. 2020-3-E

Duke Energy (Carolinas,	LLC
---------------	------------	-----

Month	Invoice Cost Per Ton	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU
Jun-19	54.61	13.72	68.33	2.77
Jul-19	51.67	49.87	101.54	4.07
Aug-19	51.51	15.50	67.01	2.70
Sep-19	52.85	14.48	67.33	2.70
Oct-19	53.94	46.93	100.87	4.08
Nov-19	49.64	13.76	63.40	2.58
Dec-19	49.32	18.84	68.16	2.78
Jan-20	52.77	59.32	112.09	4.51
Feb-20	54.53	13.03	67.56	2.75
Mar-20	50.76	21.36	72.12	2.91
Apr-20	101.74	73.69	175.43	7.07
May-20	49.22	19.69	68.91	2.79

Duk	c Energy 1	1051033, 12	i LC
Invoice Cost Per Ton \$	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU
55.53	15.79	71.32	2.83
52.55	53.18	105.73	4.19
54.32	16.41	70.73	2.79
55.49	15.76	71.25	2.83
52.99	58.74	111.73	4.44
52.21	14.71	66.92	2.65
50.31	18.77	69.08	2.71
48.47	50.58	99.05	3.99
66.56	23.28	89.84	3.64
59.17	36.24	95.41	3.82
93.18	41.13	134.31	5.37
58.11	9.40	67.51	2.75

Dominion Energy South Carolina, Inc. 1

Dominion	Literation	outh curo	imu, inc.
Invoice Cost Per Ton \$	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU
57.88	25.07	82.95	3.31
57.89	23.95	81.84	3.24
57.23	24.67	81.90	3.26
58.48	26.89	85.37	3.39
57.37	36.81	94.18	3.76
56.84	39.04	95.88	3.87
54.99	28.99	83.98	3.37
52.88	29.42	82.30	3.28
54.77	33.48	88.25	3.53
53.52	33.71	87.23	3.50
57.69	33.21	90.90	3.64
57.29	34.86	92.15	3.69

¹ Cost information for Duke Energy Progress, LLC and Dominion Energy South Carolina, Inc. has not been audited as part of this docket.

Office of Regulatory Staff Cost of Fuel Burned for Electric Generation Duke Energy Carolinas, LLC For Year Ending May 2020 Docket No. 2020-3-E

Month	<u>Coal</u>		<u>Oil</u>		<u>Natural (</u>	Gas	Nuclear	<u>r</u>	Total	Burned Cost
Jun-19	\$ 64,461,914	55.33%	\$ 1,540,764	1.33%	\$ 27,392,346	23.51%	\$ 23,105,119	19.83%	\$	116,500,143
Jul-19	\$ 99,945,976	63.94%	\$ 1,045,043	0.67%	\$ 31,441,924	20.12%	\$ 23,871,078	15.27%	\$	156,304,021
Aug-19	\$ 92,374,694	62.54%	\$ 949,990	0.64%	\$ 30,520,844	20.66%	\$ 23,864,318	16.16%	\$	147,709,846
Sep-19	\$ 70,874,752	56.26%	\$ 800,950	0.63%	\$ 31,810,139	25.25%	\$ 22,502,111	17.86%	\$	125,987,952
Oct-19	\$ 42,033,179	47.47%	\$ 529,646	0.60%	\$ 22,662,622	25.59%	\$ 23,329,113	26.34%	\$	88,554,560
Nov-19	\$ 62,291,471	60.71%	\$ 1,217,941	1.19%	\$ 18,800,977	18.32%	\$ 20,291,677	19.78%	\$	102,602,066
Dec-19	\$ 35,851,930	39.65%	\$ 1,258,516	1.39%	\$ 30,923,037	34.19%	\$ 22,398,036	24.77%	\$	90,431,519
Jan-20	\$ 38,744,663	39.59%	\$ 1,223,477	1.25%	\$ 34,118,933	34.86%	\$ 23,774,052	24.30%	\$	97,861,125
Feb-20	\$ 19,231,098	25.26%	\$ 819,608	1.08%	\$ 33,970,875	44.62%	\$ 22,115,438	29.04%	\$	76,137,019
Mar-20	\$ 21,496,632	28.82%	\$ 570,458	0.76%	\$ 31,051,975	41.64%	\$ 21,463,215	28.78%	\$	74,582,280
Apr-20	\$ 27,237,989	43.65%	\$ 289,125	0.46%	\$ 16,868,441	27.03%	\$ 18,011,216	28.86%	\$	62,406,771
May-20	\$ 24,557,566	34.72%	\$ 1,007,599	1.42%	\$ 23,868,504	33.75%	\$ 21,291,668	30.11%	\$	70,725,337
Total	\$599,101,864	49.52%	\$11,253,117	0.93%	\$333,430,617	27.56%	\$266,017,041	21.99%	\$1,	209,802,639

Office of Regulatory Staff
Cost of Fuel
Duke Energy Carolinas, LLC
For Year Ending May 2020
Docket No. 2020-3-E

Month	<u>C</u>	ost of Fuel Burned	l Cost of Purchased Interchange Power	Fue	Cost Recovered from Power Sales	Solar Integration Fees			Total Fuel Costs		
Jun-19	\$	116,500,143	\$ 18,058,985	\$	(2,611,617)	\$	(1,034)	\$	131,946,477		
Jul-19	\$	156,304,021	\$ 19,575,855	\$	(3,934,856)	\$	(1,199)	\$	171,943,821		
Aug-19	\$	147,709,846	\$ 18,384,770	\$	(5,885,296)	\$	(1,290)	\$	160,208,030		
Sep-19	\$	125,987,952	\$ 35,275,725	\$	(3,591,337)	\$	(1,082)	\$	157,671,258		
Oct-19	\$	88,554,560	\$ 29,308,417	\$	(1,784,219)	\$	(925)	\$	116,077,833		
Nov-19	\$	102,602,066	\$ 28,491,855	\$	(3,836,169)	\$	(722)	\$	127,257,030		
Dec-19	\$	90,431,519	\$ 27,929,244	\$	(2,239,899)	\$	(628)	\$	116,120,236		
Jan-20	\$	97,861,125	\$ 19,951,646	\$	(1,397,741)	\$	(576)	\$	116,414,454		
Feb-20	\$	76,137,019	\$ 21,381,953	\$	(1,684,943)	\$	(595)	\$	95,833,434		
Mar-20	\$	74,582,280	\$ 13,635,670	\$	(3,992,053)	\$	(622)	\$	84,225,275		
Apr-20	\$	62,406,771	\$ 15,856,306	\$	(1,279,316)	\$	(867)	\$	76,982,894		
May-20	\$	70,725,337	\$ 17,328,989	\$	(1,433,653)	\$	(1,204)	\$	86,619,469		
Total	\$	1,209,802,639	\$ 265,179,415	\$	(33,671,099)	\$	(10,744)	\$	1,441,300,211		

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Base Fuel Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

				1	Actual			
	June 2019	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020
Total Fuel Costs	\$ 131,946,477	\$ 171,943,821	\$ 160,208,030	\$ 157,671,258	\$ 116,077,833	\$ 127,257,030	\$ 116,120,236	\$ 116,414,454
Avoided Fuel Benefit of SC NEM	\$ 357,178	\$ 358,741	\$ 358,953	\$ 361,072	\$ 348,846	\$ 337,117	\$ 341,787	\$ 346,455
Adjusted System Fuel Costs	\$ 132,303,655	\$ 172,302,562	\$ 160,566,983	\$ 158,032,330	\$ 116,426,679	\$ 127,594,147	\$ 116,462,023	\$ 116,760,909
Total System kWh Sales	7,541,462,943	8,305,219,975	8,537,753,367	8,281,021,662	7,008,401,161	6,522,932,412	7,150,989,325	7,183,161,407
NEM Solar Generation kWh	10,992,414	11,040,529	11,047,105	11,112,256	10,731,051	10,364,604	10,508,031	10,651,536
Adjusted System kWh Sales	7,552,455,357	8,316,260,504	8,548,800,472	8,292,133,918	7,019,132,212	6,533,297,016	7,161,497,356	7,193,812,943
Fuel Costs per kWh Sales	\$ 0.017518	\$ 0.020719	\$ 0.018782	\$ 0.019058	\$ 0.016587	\$ 0.019530	\$ 0.016262	\$ 0.016231
S.C. Retail kWh Sales	1,853,845,823	2,006,467,798	2,082,064,398	2,020,390,470	1,745,407,713	1,605,281,709	1,699,148,577	1,689,507,456
NEM Solar Generation kWh	10,992,414	11,040,529	11,047,105	11,112,256	10,731,051	10,364,604	10,508,031	10,651,536
Adjusted S.C. Retail kWh Sales	1,864,838,237	2,017,508,327	2,093,111,503	2,031,502,726	1,756,138,764	1,615,646,313	1,709,656,608	1,700,158,992
S.C. Base Fuel Costs	\$ 32,668,173	\$ 41,800,261	\$ 39,313,655	\$ 38,716,586	\$ 29,129,156	\$ 31,553,290	\$ 27,802,855	\$ 27,594,839
Avoided Fuel Benefit of S.C. NEM	\$ (357,178)	\$ (358,741)	\$ (358,953)	\$ (361,072)	\$ (348,846)	\$ (337,117)	\$ (341,787)	\$ (346,455)
Adjusted S.C. Base Fuel Costs	\$ 32,310,995	\$ 41,441,520	\$ 38,954,702	\$ 38,355,514	\$ 28,780,310	\$ 31,216,173	\$ 27,461,068	\$ 27,248,384
S.C. Retail Fuel Costs Collected	\$ 36,424,362	\$ 39,423,080	\$ 40,908,401	\$ 39,696,632	\$ 35,394,695	\$ 33,965,208	\$ 35,964,179	\$ 35,760,115
Fuel Benefits in DERP NEM Incentive	\$ (152,027)	\$ (152,728)	\$ (152,825)	\$ (153,715)	\$ (137,301)	\$ (137,602)	\$ (120,639)	\$ (122,716)
Adjusted S.C. Retail Costs Collected	\$ 36,272,335	\$ 39,270,352	\$ 40,755,576	\$ 39,542,917	\$ 35,257,394	\$ 33,827,606	\$ 35,843,540	\$ 35,637,399
Deferred Fuel Entry- (Over)/Under-Recovery	\$ (3,961,340)	\$ 2,171,168	\$ (1,800,874)	\$ (1,187,403)	\$ (6,477,084)	\$ (2,611,433)	\$ (8,382,472)	\$ (8,389,015)
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	s -	\$ -
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	s -	\$ -
Cumulative (Over)/Under-Recovery Prior Month	\$ 86,217,228	\$ 82,255,888	\$ 84,427,056	\$ 82,626,182	\$ 81,438,779	\$ 74,961,695	\$ 72,350,262	\$ 63,967,790
Cumulative (Over)/Under-Recovery	\$ 82,255,888	\$ 84,427,056	\$ 82,626,182	\$ 81,438,779	\$ 74,961,695	\$ 72,350,262	\$ 63,967,790	\$ 55,578,775

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Base Fuel Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

		A	Actual		Estimated							
	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020				
Total Fuel Costs	\$ 95,833,434	\$ 84,225,275	\$ 76,982,894	\$ 86,619,469	\$ 123,495,174	\$ 157,982,730	\$ 137,901,601	\$ 113,554,058				
Avoided Fuel Benefit of SC NEM	\$ 348,340	\$ 350,407	\$ 352,690	\$ 354,170	\$ 356,653	\$ 366,364	\$ 366,306	\$ 366,287				
Adjusted System Fuel Costs	\$ 96,181,774	\$ 84,575,682	\$ 77,335,584	\$ 86,973,639	\$ 123,851,827	\$ 158,349,094	\$ 138,267,907	\$ 113,920,345				
Total System kWh Sales	7,218,451,279	6,546,859,177	5,937,728,447	5,638,927,495	6,734,780,109	7,783,263,903	8,303,520,666	7,670,294,572				
NEM Solar Generation kWh	10,709,483	10,773,043	10,843,178	10,888,676	10,965,044	11,263,622	11,261,818	11,261,243				
Adjusted System kWh Sales	7,229,160,762	6,557,632,220	5,948,571,625	5,649,816,171	6,745,745,153	7,794,527,525	8,314,782,484	7,681,555,815				
Fuel Costs per kWh Sales	\$ 0.013305	\$ 0.012897	\$ 0.013001	\$ 0.015394	\$ 0.018360	\$ 0.020315	\$ 0.016629	\$ 0.014830				
S.C. Retail kWh Sales	1,751,773,205	1,605,890,341	1,455,867,918	1,362,977,929	1,623,613,976	1,828,330,042	1,983,691,625	1,871,950,619				
NEM Solar Generation kWh	10,709,483	10,773,043	10,843,178	10,888,676	10,965,044	11,263,622	11,261,818	11,261,243				
Adjusted S.C. Retail kWh Sales	1,762,482,688	1,616,663,384	1,466,711,096	1,373,866,605	1,634,579,020	1,839,593,664	1,994,953,443	1,883,211,862				
S.C. Base Fuel Costs	\$ 23,449,293	\$ 20,850,576	\$ 19,068,268	\$ 21,149,392	\$ 30,010,858	\$ 37,372,116	\$ 33,174,414	\$ 27,928,736				
Avoided Fuel Benefit of S.C. NEM	\$ (348,340)	\$ (350,407)	\$ (352,690)	\$ (354,170)	\$ (356,653)	\$ (366,364)	\$ (366,306)	\$ (366,287)				
Adjusted S.C. Base Fuel Costs	\$ 23,100,953	\$ 20,500,169	\$ 18,715,578	\$ 20,795,222	\$ 29,654,205	\$ 37,005,752	\$ 32,808,108	\$ 27,562,449				
S.C. Retail Fuel Costs Collected	\$ 37,078,032	\$ 33,990,275	\$ 30,814,900	\$ 28,848,791	\$ 34,365,413	\$ 38,698,434	\$ 41,986,817	\$ 39,621,707				
Fuel Benefits in DERP NEM Incentive	\$ (123,049)	\$ (123,435)	\$ (124,234)	\$ (125,410)	\$ (125,954)	\$ (129,833)	\$ (129,807)	\$ (129,799)				
Adjusted S.C. Retail Costs Collected	\$ 36,954,983	\$ 33,866,840	\$ 30,690,666	\$ 28,723,381	\$ 34,239,459	\$ 38,568,601	\$ 41,857,010	\$ 39,491,908				
Deferred Fuel Entry- (Over)/Under-Recovery	\$ (13,854,030)	\$ (13,366,671)	\$ (11,975,088)	\$ (7,928,159)	\$ (4,585,254)	\$ (1,562,849)	\$ (9,048,902)	\$ (11,929,459)				
Company Accounting Adjustments	\$ -	\$ (23) (A	ı) \$ -	\$ (198,316) (B)	s -	\$ -	s -	\$ -				
ORS Accounting Adjustments	\$ -	s -	\$ -	\$ -	\$ -	\$ -	s -	\$ -				
Cumulative (Over)/Under-Recovery Prior Month	\$ 55,578,775	\$ 41,724,745	\$ 28,358,051	\$ 16,382,963	\$ 8,256,488	\$ 3,671,234	\$ 2,108,385	\$ (6,940,517)				
Cumulative (Over)/Under-Recovery	\$ 41,724,745	\$ 28,358,051	\$ 16,382,963	\$ 8,256,488	\$ 3,671,234	\$ 2,108,385	\$ (6,940,517)	\$ (18,869,976)				

	May 2020	September 2020
Cumulative (Over)/Under-Recovery of Base Fuel Costs (Audit Exhibit ADB-5)	\$ 8,256,488	\$ (18,869,976)
Cumulative (Over)/Under-Recovery of Environmental Costs (Audit Exhibit ADB-7)	\$ (1,044,760)	\$ (1,249,554)
Cumulative (Over)/Under-Recovery of Capacity Costs (Audit Exhibit ADB-8)	\$ (1,748,011)	\$ 408,492
Cumulative (Over)/Under-Recovery of DERP Incremental Costs (Audit Exhibit ADB-9)	\$ (2,906,925)	\$ (2,704,178)
Cumulative (Over)/Under-Recovery of DERP Avoided Costs (Audit Exhibit ADB-10)	\$ (117,601)	\$ (121,071)
Net Cumulative (Over)/Under-Recovery Balance	\$ 2,439,191	\$ (22,536,287)
		

Office of Regulatory Staff
Total Environmental Costs
Duke Energy Carolinas, LLC
For Year Ending May 2020
Docket No. 2020-3-E

Month	 agnesium Hyd lcium Carbona Other Sorbe	ate, and	<u>Emi</u>	ssion Allo	wances	<u>A</u>	Ammonia an	d Urea	Lime/Lime	<u>stone</u>	<u>M</u>	IerContro <u>Plus</u>	18034	Total Environmental Costs
Jun-19	\$ 149,390	5.90%	\$	376	0.01%	\$	520,504	20.52%	\$ 1,865,946	73.57%	\$	-	0.00%	\$ 2,536,216
Jul-19	\$ 255,985	8.61%	\$	140	0.00%	\$	189,058	6.35%	\$ 2,494,073	83.85%	\$	35,345	1.19%	\$ 2,974,601
Aug-19	\$ 332,386	10.47%	\$	632	0.02%	\$	472,554	14.89%	\$ 2,298,618	72.42%	\$	69,700	2.20%	\$ 3,173,890
Sep-19	\$ 252,332	9.42%	\$	502	0.02%	\$	695,639	25.96%	\$ 1,622,550	60.57%	\$	107,874	4.03%	\$ 2,678,897
Oct-19	\$ 142,234	8.79%	\$	417	0.03%	\$	278,975	17.25%	\$ 1,195,940	73.93%	\$	-	0.00%	\$ 1,617,566
Nov-19	\$ 211,992	7.31%	\$	205	0.01%	\$	622,974	21.49%	\$ 2,063,433	71.19%	\$	-	0.00%	\$ 2,898,604
Dec-19	\$ 226,602	19.63%	\$	334	0.03%	\$	(34,420)	-2.98%	\$ 962,178	83.32%	\$	-	0.00%	\$ 1,154,694
Jan-20	\$ 177,829	11.21%	\$	221	0.01%	\$	345,383	21.77%	\$ 1,063,354	67.01%	\$	-	0.00%	\$ 1,586,787
Feb-20	\$ 51,996	6.06%	\$	182	0.02%	\$	163,130	19.01%	\$ 642,941	74.91%	\$	-	0.00%	\$ 858,249
Mar-20	\$ 62,407	9.41%	\$	438	0.07%	\$	19,363	2.91%	\$ 581,063	87.61%	\$	-	0.00%	\$ 663,271
Apr-20	\$ 59,276	5.78%	\$	722	0.07%	\$	132,883	12.95%	\$ 833,434	81.20%	\$	-	0.00%	\$ 1,026,315
May-20	\$ 33,017	3.37%	\$	73	0.01%	\$	68,514	6.99%	\$ 878,142	89.63%	\$	-	0.00%	\$ 979,746
Totals	\$ 1,955,446	8.83%	\$	4,242	0.02%	\$	3,474,557	15.69%	\$ 16,501,672	74.50%	\$	212,919	0.96%	\$22,148,836

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Environmental Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

								A	ctual							
		June		July		August		September		October	November		December		January	
		2019		2019		2019	2019		2019			2019	2019		2020	
Total Environmental Costs	\$	2,536,216	\$	2,974,601	\$	3,173,890	\$	2,678,897	\$	1,617,566	\$	2,898,604	\$	1,154,694	\$	1,586,787
Environmental Costs Recovered Through Off-System Sales	\$	(30,136)	\$	(51,496)	\$	(103,028)	\$	(61,721)	\$	(23,454)	\$	(25,169)	\$	(12,834)	\$	(8,247)
Net Environmental Costs	\$	2,506,080	\$	2,923,105	\$	3,070,862	\$	2,617,176	\$	1,594,112	\$	2,873,435	\$	1,141,860	\$	1,578,540
S.C. Retail kWh Sales	1,8	353,845,823	2,	006,467,798	2,	082,064,398	2,	020,390,470	1,	745,407,713	1,	605,281,709	1,	699,148,577	1,6	89,507,456
Total System kWh Sales Excluding Off- System Sales	7,	541,462,943	8,	305,219,975	8,	537,753,367	8,	281,021,662	7,	008,401,161	6,	522,932,412	7,	150,989,325	7,1	83,161,407
S.C Allocation Factor		24.58%		24.16%		24.39%		24.40%		24.90%		24.61%		23.76%		23.52%
S.C. Retail Basis of Total Environmental Costs	\$	616,046	\$	706,196	\$	748,878	\$	638,534	\$	397,006	\$	707,147	\$	271,318	\$	371,279
Amounts Billed to Retail Customers	\$	322,596	\$	349,685	\$	362,369	\$	351,803	\$	404,967	\$	480,318	\$	558,387	\$	572,655
(Over)/Under-Recovery	\$	293,450	\$	356,511	\$	386,509	\$	286,731	\$	(7,961)	\$	226,829	\$	(287,069)	\$	(201,376)
Company Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ORS Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Cumulative (Over)/Under-Recovery- Prior Month	\$	(965,535)	\$	(672,085)	\$	(315,574)	\$	70,935	\$	357,666	\$	349,705	\$	576,534	\$	289,465
Cumulative (Over)/Under-Recovery	\$	(672,085)	\$	(315,574)	\$	70,935	\$	357,666	\$	349,705	\$	576,534	\$	289,465	\$	88,089

		Actual								Estimated							
	F	Tebruary		March		April		May		June	July		August		September		
		2020		2020		2020		2020		2020	2020		2020		2020		
Total Environmental Costs	\$	858,249	\$	663,271	\$	1,026,315	\$	979,746	\$	1,964,325	\$	2,661,602	\$	2,991,514	\$	2,004,310	
Environmental Costs Recovered Through Off-System Sales	\$	(11,955)	\$	(40,097)	\$	(7,847)	\$	(7,650)	\$	(23,444)	\$	(14,947)	\$	(25,716)	\$	(6,146)	
Net Environmental Costs	\$	846,294	\$	623,174	\$	1,018,468	\$	972,096	\$	1,940,881	\$	2,646,655	\$	2,965,798	\$	1,998,164	
S.C. Retail kWh Sales	1,7	51,773,205	1,6	05,890,341	1,	455,867,918	1,	362,977,929	1,	623,613,976	1,	828,330,042	1,	983,691,625	1,	371,950,619	
Total System kWh Sales Excluding Off- System Sales	7,2	18,451,279	6,5	46,859,177	5,	937,728,447	5,0	638,927,495	6,	734,780,109	7,	783,263,903	8,	303,520,666	7,	670,294,572	
S.C Allocation Factor		24.27%		24.53%		24.52%		24.17%		24.11%		23.49%		23.89%		24.41%	
S.C. Retail Basis of Total Environmental Costs	\$	205,379	\$	152,859	\$	249,718	\$	234,964	\$	467,906	\$	621,713	\$	708,522	\$	487,656	
Amounts Billed to Retail Customers	\$	578,465	\$	516,993	\$	454,897	\$	425,414	\$	533,204	\$	638,934	\$	688,209	\$	630,244	
(Over)/Under-Recovery	\$	(373,086)	\$	(364,134)	\$	(205,179)	\$	(190,450)	\$	(65,298)	\$	(17,221)	\$	20,313	\$	(142,588)	
Company Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
ORS Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Cumulative (Over)/Under-Recovery- Prior Month	\$	88,089	\$	(284,997)	\$	(649,131)	\$	(854,310)	\$	(1,044,760)	\$	(1,110,058)	\$	(1,127,279)	\$	(1,106,966)	
Cumulative (Over)/Under-Recovery	\$	(284,997)	\$	(649,131)	\$	(854,310)	\$	(1,044,760)	\$	(1,110,058)	\$	(1,127,279)	\$	(1,106,966)	\$	(1,249,554)	

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Capacity Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

					Actual	Actual									
	June	July	August	September	October	November	December	January							
	2019	2019	2019	2019	2019	2019	2019	2020							
PURPA Purchased Power Capacity Costs	\$ 2,502,503	\$ 6,660,685	\$ 7,119,137	\$ 4,362,373	\$ 3,576,925	\$ 1,084,530	\$ 992,891	\$ 1,340,239							
Natural Gas Capacity Costs	\$ 3,723,026	\$ 3,888,296	\$ 3,794,324	\$ 3,781,992	\$ 3,317,997	\$ 2,288,809	\$ 3,689,946	\$ 3,979,724							
Total Costs for the current month	\$ 6,225,529	\$ 10,548,981	\$ 10,913,461	\$ 8,144,365	\$ 6,894,922	\$ 3,373,339	\$ 4,682,837	\$ 5,319,963							
S.C. Retail kWh Sales	1,853,845,823	2,006,467,798	2,082,064,398	2,020,390,470	1,745,407,713	1,605,281,709	1,699,148,577	1,689,507,456							
Total System kWh Sales Excluding Off-System Sales	7,541,462,943	8,305,219,975	8,537,753,367	8,281,021,662	7,008,401,161	6,522,932,412	7,150,989,325	7,183,161,407							
S.C. Allocation Factor	24.58%	24.16%	24.39%	24.40%	24.90%	24.61%	23.76%	23.52%							
S.C. Share of Capacity Costs	\$ 1,530,362	\$ 2,548,541	\$ 2,661,418	\$ 1,987,049	\$ 1,717,146	\$ 830,173	\$ 1,112,690	\$ 1,251,276							
Amount Billed to Retail Customers	\$ 2,013,016	\$ 2,206,166	\$ 2,277,771	\$ 2,207,846	\$ 1,433,187	\$ 690,484	\$ 832,734	\$ 865,557							
(Over)/Under-Recovery	\$ (482,654)	\$ 342,375	\$ 383,647	\$ (220,797)	\$ 283,959	\$ 139,689	\$ 279,956	\$ 385,719							
Company Accounting Adjustments	s -	\$ -	s -	s -	\$ -	s -	s -	s -							
ORS Accounting Adjustments	s -	\$ -	s -	s -	\$ -	s -	s -	s -							
Cumulative (Over)/Under-Recovery - Prior Month	\$ (5,379,538)	\$ (5,862,192)	\$ (5,519,817)	\$ (5,136,170)	\$ (5,356,967)	\$ (5,073,008)	\$ (4,933,319)	\$ (4,653,363)							
Cumulative (Over)/Under-Recovery	\$ (5,862,192)	\$ (5,519,817)	\$ (5,136,170)	\$ (5,356,967)	\$ (5,073,008)	\$ (4,933,319)	\$ (4,653,363)	\$ (4,267,644)							

				Actual			Estimated								
	February		March		April		May		June		July		August		September
	2020		2020		2020		2020		2020		2020		2020		2020
PURPA Purchased Power Capacity Costs	\$ 1,417,7	51 S	1,024,789	\$	1,134,440	\$	1,384,847	\$	2,229,546	\$	3,744,397	\$	3,654,901	\$	2,154,269
Natural Gas Capacity Costs	\$ 3,871,7	52 \$	4,418,821	\$	4,261,140	\$	4,765,673	\$	3,929,746	\$	2,969,085	\$	2,965,417	\$	3,096,084
Total Costs for the current month	\$ 5,289,5	3 \$	5,443,610	\$	5,395,580	\$	6,150,520	\$	6,159,292	\$	6,713,482	\$	6,620,318	\$	5,250,353
S.C. Retail kWh Sales	1,751,773,2) 5	1,605,890,341	1	,455,867,918	1,	362,977,929	1	,623,613,976	1	,828,330,042	1	983,691,625	1,	871,950,619
Total System kWh Sales Excluding Off-System Sales	7,218,451,2	79	5,546,859,177	5	,937,728,447	5	,638,927,495	6	,734,780,109	7	,783,263,903	8	303,520,666	7,	670,294,572
S.C. Allocation Factor	24.2	1%	24.53%		24.52%		24.17%		24.11%		23.49%		23.89%		24.41%
S.C. Share of Capacity Costs	\$ 1,283,6	56 \$	1,335,272	\$	1,322,939	\$	1,486,634	\$	1,484,876	\$	1,577,033	\$	1,581,578	\$	1,281,359
Amount Billed to Retail Customers	\$ 864,9	41 \$	763,798	\$	661,591	\$	618,538	\$	793,645	\$	976,766	\$	1,049,492	\$	948,440
(Over)/Under-Recovery	\$ 418,7	15 \$	571,474	\$	661,348	\$	868,096	\$	691,231	\$	600,267	\$	532,086	\$	332,919
Company Accounting Adjustments	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ORS Accounting Adjustments	\$	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Cumulative (Over)/Under-Recovery - Prior Month	\$ (4,267,6	14) \$	(3,848,929)	\$	(3,277,455)	\$	(2,616,107)	\$	(1,748,011)	S	(1,056,780)	\$	(456,513)	\$	75,573
Cumulative (Over)/Under-Recovery	\$ (3,848,9	29) \$	(3,277,455)	\$	(2,616,107)	\$	(1,748,011)	\$	(1,056,780)	\$	(456,513)	\$	75,573	\$	408,492

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Distributed Energy Resource Program Incremental Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

								Actual							
	June		July		August		eptember	October		November		December		January	
	2019		2019		2019		2019		2019		2019		2019		2020
Purchased Power Agreements	\$ 1,653	\$	1,003	\$	1,256	\$	1,202	\$	1,131	\$	905	\$	756	\$	654
NEM Incentive	\$ 348,500	\$	346,976	\$	346,843	\$	350,101	\$	351,165	\$	353,428	\$	357,130	\$	360,685
Solar Rebate Program - Amortization	\$ 9,191	\$	8,981	\$	12,751	\$	12,751	\$	12,751	\$	12,751	\$	12,751	\$	12,612
Solar Rebate Program - Carrying Costs	\$ 8,930	\$	8,774	\$	10,495	\$	12,301	\$	12,126	\$	12,056	\$	11,986	\$	11,851
Shared Solar Program	\$ 32,202	\$	23,697	\$	25,843	\$	27,260	\$	26,612	\$	16,131	\$	11,452	\$	8,171
NEM Avoided Capacity	\$ 36,374	\$	36,532	\$	36,554	\$	36,770	\$	35,418	\$	34,087	\$	34,555	\$	37,240
NEM Meter Costs	\$ 59,271	\$	59,082	\$	59,179	\$	59,450	\$	59,814	\$	60,026	\$	60,370	\$	60,728
General and Administrative Expenses	\$ 27,710	\$	21,608	\$	33,883	\$	32,174	\$	31,442	\$	(33,922)	\$	27,907	\$	31,214
Interest on under-collection due to per-account cost caps	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Incremental Costs	\$ 523,831	\$	506,653	\$	526,804	\$	532,009	\$	530,459	\$	455,462	\$	516,907	\$	523,155
Revenue Collected	\$ 901,392	\$	944,873	\$	924,878	\$	927,455	\$	768,144	\$	606,126	\$	608,150	\$	609,508
(Over)/Under-Recovery	\$ (377,561)	\$	(438,220)	\$	(398,074)	\$	(395,446)	\$	(237,685)	\$	(150,664)	\$	(91,243)	\$	(86,353)
Company Accounting Adjustments	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ORS Accounting Adjustments	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Cumulative (Over)/Under-Recovery - Prior Month	\$ (474,257)	\$	(851,818)	\$	(1,290,038)	\$	(1,688,112)	\$	(2,083,558)	\$ (2,321,243)	\$ ((2,471,907)	\$	2,563,150)
Cumulative (Over)/Under-Recovery	\$ (851,818)	\$ ((1,290,038)	\$	(1,688,112)	\$	(2,083,558)	\$	(2,321,243)	\$ (2,471,907)	\$ ((2,563,150)	\$ (2,649,503)

					Actual				Estimated								
	F	February		March		April		May		June	July			August		ptember	
		2020		2020		2020		2020		2020		2020		2020		2020	
Purchased Power Agreements	\$	651	\$	1,073	\$	1,123	\$	1,319	\$	10,156	\$	22,612	\$	22,612	\$	27,915	
NEM Incentive	\$	364,123	\$	367,443	\$	372,189	\$	374,662	\$	378,634	\$	425,148	\$	426,118	\$	426,427	
Solar Rebate Program - Amortization	\$	12,612	\$	12,611	\$	19,708	\$	19,708	\$	19,708	\$	22,524	\$	25,340	\$	28,155	
Solar Rebate Program - Carrying Costs	\$	11,709	\$	11,639	\$	15,071	\$	18,464	\$	18,356	\$	19,637	\$	22,291	\$	24,929	
Shared Solar Program	\$	7,194	\$	12,865	\$	19,115	\$	36,742	\$	30,915	\$	12,005	\$	12,005	\$	12,005	
NEM Avoided Capacity	\$	37,443	\$	37,358	\$	37,602	\$	37,761	\$	38,026	\$	51,142	\$	51,142	\$	51,142	
NEM Meter Costs	\$	60,927	\$	61,222	\$	61,571	\$	61,789	\$	62,181	\$	67,004	\$	67,256	\$	67,595	
General and Administrative Expenses	\$	49,929	\$	(1,636)	\$	31,394	\$	27,981	\$	24,835	\$	57,434	\$	57,434	\$	57,434	
Interest on under-collection due to per-account cost caps	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Total Incremental Costs	\$	544,588	\$	502,575	\$	557,773	\$	578,426	\$	582,811	\$	677,506	\$	684,198	\$	695,602	
Revenue Collected	\$	608,362	\$	610,006	\$	610,418	\$	611,293	\$	614,237	\$	607,374	\$	607,711	\$	608,048	
(Over)/Under-Recovery	\$	(63,774)	\$	(107,431)	\$	(52,645)	\$	(32,867)	\$	(31,426)	\$	70,132	\$	76,487	\$	87,554	
Company Accounting Adjustments	\$	-	\$	(705) ((C) \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
ORS Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Cumulative (Over)/Under-Recovery - Prior Month	\$ ((2,649,503)	\$ ((2,713,277)	\$ (2,821,413)	\$ ((2,874,058)	\$	(2,906,925)	\$ (2,938,351)	\$ (2,868,219)	\$ (2,791,732)	
Cumulative (Over)/Under-Recovery	\$ ((2,713,277)	\$ ((2,821,413)	\$ (2,874,058)	\$ ((2,906,925)	\$	(2,938,351)	\$ (2,868,219)	\$ (2,791,732)	\$ (2,704,178)	

Office of Regulatory Staff Details of the Computation of the (Over)/Under-Recovery of Distributed Energy Resource Program Avoided Costs Duke Energy Carolinas, LLC June 2019 - September 2020 Docket No. 2020-3-E

	Actual																
		June 2019		July 2019		August 2019		September 2019		October 2019		November 2019		December 2019		anuary 2020	
Purchase Power Agreements	\$	4,731	\$	3,629	\$	4,119	\$	4,080	\$	3,896	\$	8,140	\$	2,066	\$	1,707	
Shared Solar Program	\$	29,626	\$	21,876	\$	26,100	\$	25,988	\$	25,788	\$	11,306	\$	15,692	\$	13,453	
Total Avoided Costs	\$	34,357	\$	25,505	\$	30,219	\$	30,068	\$	29,684	\$	19,446	\$	17,758	\$	15,160	
S.C. Retail kWh Sales	1,8	1,853,845,823		2,006,467,798		2,082,064,398		2,020,390,470		1,745,407,713		1,605,281,709		1,699,148,577		1,689,507,456	
Total System kWh Sales Excluding Off-System Sales	7,5	41,462,943	8,30	5,219,975	8,53	37,753,367	8,2	81,021,662	7,00	08,401,161	6,5	22,932,412	7,1	50,989,325	7,1	83,161,407	
S.C. Allocation Factor		24.58%		24.16%		24.39%		24.40%		24.90%		24.61%		23.76%		23.52%	
S.C. Share of Avoided Costs	\$	8,446	\$	6,162	\$	7,369	\$	7,336	\$	7,393	\$	4,786	\$	4,219	\$	3,566	
Amount Billed to Retail Customers	\$	9,067	\$	9,950	\$	10,271	\$	9,952	\$	15,064	\$	21,360	\$	24,756	\$	25,370	
(Over)/Under-Recovery	\$	(621)	\$	(3,788)	\$	(2,902)	\$	(2,616)	\$	(7,671)	\$	(16,574)	\$	(20,537)	\$	(21,804)	
Company Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
ORS Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Cumulative (Over)/Under-Recovery - Prior Month	\$	(1,470)	\$	(2,091)	\$	(5,879)	\$	(8,781)	\$	(11,397)	\$	(19,068)	\$	(35,642)	\$	(56,179)	
Cumulative (Over)/Under-Recovery	\$	(2,091)	\$	(5,879)	\$	(8,781)	\$	(11,397)	\$	(19,068)	s	(35,642)	\$	(56,179)	\$	(77,983)	

					Actual				Estimated									
	F	ebruary 2020	March 2020		April 2020		May 2020		June 2020		July 2020		August 2020		Se	eptember 2020		
Purchase Power Agreements	\$	1,727	\$	67,553	\$	38,251	\$	15,120	\$	98,663	\$	81,340	\$	81,322	\$	95,750		
Shared Solar Program	\$	13,423	\$	13,699	\$	17,176	\$	29,879	\$	28,241	\$	20,151	\$	20,151	\$	20,151		
Total Avoided Costs	\$	15,150	\$	81,252	\$	55,427	\$	44,999	\$	126,904	\$	101,491	\$	101,473	\$	115,901		
S.C. Retail kWh Sales	1,7	51,773,205	1,605,890,341		1,4	1,455,867,918		1,362,977,929		1,623,613,976		1,828,330,042		83,691,625	1,871,950,619			
Total System kWh Sales Excluding Off-System Sales	7,2	18,451,279	6,546,859,177		5,937,728,447		5,638,927,495		6,7	6,734,780,109		7,783,263,903		8,303,520,666		70,294,572		
S.C. Allocation Factor		24.27%		24.53%		24.52%		24.17%		24.11%		23.49%		23.89%		24.41%		
S.C. Share of Avoided Costs	\$	3,677	\$	19,930	\$	13,590	\$	10,877	\$	30,594	\$	23,841	\$	24,242	\$	28,286		
Amount Billed to Retail Customers	\$	25,633	\$	22,934	\$	20,219	\$	18,906	\$	23,668	\$	28,315	\$	30,493	\$	27,957		
(Over)/Under-Recovery	s	(21,956)	\$	(3,004)	\$	(6,629)	\$	(8,029)	\$	6,926	\$	(4,474)	\$	(6,251)	\$	329		
Company Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
ORS Accounting Adjustments	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Cumulative (Over)/Under-Recovery - Prior Month	\$	(77,983)	\$	(99,939)	\$	(102,943)	\$	(109,572)	\$	(117,601)	\$	(110,675)	\$	(115,149)	\$	(121,400)		
Cumulative (Over)/Under-Recovery	\$	(99,939)	\$	(102,943)	\$	(109,572)	\$	(117,601)	\$	(110,675)	\$	(115,149)	\$	(121,400)	\$	(121,071)		